

METHOD AND APPARATUS FOR ALIGNING MEMORY WRITE DATA  
IN A MICROPROCESSOR

ABSTRACT OF THE DISCLOSURE

5           There is provided a method for aligning and inserting  
data elements into a memory based upon an instruction  
sequence consisting of one or more alignment instructions  
and a single store instruction. Given a data item that  
includes a data element to be stored, the method includes  
10       the step of aligning the data element in another memory with  
respect to a predetermined position in the memory, in  
response to the one or more alignment instructions. A mask  
is dynamically generated to enable writing of memory bit  
lines that correspond to the aligned data element. The  
15       memory bit lines are written to the memory under a control  
of the mask. The generating and writing steps are performed  
in response to the single store instruction.